

## REMEDIAL CEMENTING PROCEDURE

BOYD NO. 5  
510' FHL & 1980' FEL  
SEC. 23, T-22-S, R-37-E  
DRINKARD & TUBB GAS FIELDS  
LEA COUNTY, NEW MEXICO

August 6, 1975

### Well Data

Elevation: 3334' DF  
Casing: 13 3/8" 40# @ 314' w/500 sx.-circ.  
8 5/8" 28# @ 2424' w/800 sx.-TOC @ 2424' (Temp. Survey)  
5 1/2" 17# @ 6377' w/500 sx.-Est. TOC @ 4314'  
TD: 6448'  
Perforations: Tubb 5990'-6130'  
Drinkard OH 6377'-6448'  
Tubing: 2 3/8" EUE @ 6265'  
1.315" J&L @ 6000'  
Packer: Baker Model "D" @ 6145'

Note: NMOCC supervisor must be notified at least 24 hours prior to commencement of the following procedure.

### Procedure

1. MIRUPU. Kill Drinkard and Tubb zones with 2% KCl water containing 1 gal./1000 gals. Morflo II. Install BOPE.
2. Pull 2 3/8" and 1.315" tubing simultaneously, (smaller tubing probably wrapped around larger).
3. Run RBP on 2 3/8" tubing. Set at 5800'(+). Test RBP to 3000 psi. Pull tubing.
4. RU Welex Microseismogram/GR log from 5800' to 3000' to determine free pipe. Relay results to Midland Engineering and NMOCC. RD Welex.  

The 8 5/8" - 5 1/2" annulus has been squeezed with 830 sx. from the surface. The bond log will be used to find the free pipe between the squeezed cement and the original cement top if such exists. The following steps are contingent on the results of the bond log and NMOCC approval.
5. RU Welex. Dump 2 sx. sand on RBP. Perforate at the bottom and the top of the free pipe with 4 shots over a 1' interval using a 4" OD casing gun loaded with 19 gm. "DP" charges (3 - .49" holes).
6. Run drillable cement retainer on wireline and set above lower perforations. RD Welex. Run tubing and tie into retainer.